Chapter 1
Assessing Media Literacy in Teacher Education

Vitor Tomé
Algarve University, Portugal

ABSTRACT
The twenty-first century citizens must develop their media literacy competence at several levels such as technique, reflective and creative, auto-regulation, social participation and pedagogical. Even though the citizens’ empowerment is a general society responsibility, school plays a crucial role, especially if school is able to respond to a set of challenges, namely breaking the traditional resistance to change, integrating formal and informal learning, educating for the media beyond the technical dimension, overcoming the digital divides, protecting citizens’ data, and training teachers. This chapter focuses on this last challenge, presenting three research projects which involved in-service teacher training (2007-2011; 2012-2015; 2016-2018). Results showed that K-12 teachers are able to develop media literacy activities with their pupils, using traditional and/or digital technologies, during in-service teacher training courses. As such, they are also able to overcome the lack of technologies in their classrooms by using their own devices or pupils’ devices.

INTRODUCTION
Between 2008 and 2011 the Portuguese Government implemented a ‘one laptop per child program’ at the Primary School level, consisting of the distribution of 750 personal computers to children, which would reduce the student-computer ratio from 15/1, in 2006/07, to 1/1 in 2010 (GEPE, 2011). The program, titled ‘e-escolinha,’ was presented as revolutionary at the pedagogical level, but the assessment results showed a completely different scenario: it had no significant effect on the classroom pedagogical practice, mainly due to the lack of previous teacher training, even though teachers also pointed out difficulties on work organization and management as well as on logistical aspects (Pereira, Pereira, & Melro, 2015). An independent study also concluded that “media education or media literacy could have provided a conceptual framework” for the ‘e-escolinha’ program, but “digital media literacy objectives were completely marginalized” (idem, p. 88).

DOI: 10.4018/978-1-5225-3082-4.ch001
The ‘e-escolinha’ case study showed that technology does not change pedagogy by itself, and pointed out the need of an ecological approach when designing technology-based pedagogical programs. One the one hand, technology and the media boost the integration of formal learning environments, non-formal and informal, which is understandable, because “the mediatic-educational question is not only a school issue but also a family issue and an issue for all educators who work in the territory” (Rivoltella, 2012, p. 25). On the other hand, the articulation of formal and informal learning requires the enlargement of the concept of literacy, which keeps the traditional logic, based on reading, writing, listening, and speaking, but includes “digital literacy,” which is “create, work, share, socialize, research, play, collaborate, communicate and learn” (Meyers, Erickson, & Small, 2013, p. 356).

We are living in the era of “digital and media literacy,” which encompasses “the full range of cognitive, emotional, and social competencies that include the use of text, tools and technologies; the skills of critical thinking and analysis; the practice of messaging composition and creativity; the ability to engage in reflection and ethical thinking; as well as active participation through teamwork and collaboration” (Hobbs, 2010, p. 17). Media literacy “relates to the ability to access the media, to understand and critically evaluate different aspects of the media and media content and to create communications in a variety of contexts” (Commission of the European Communities, 2009, p. 10). These different terminologies are used to refer media literacy, and include digital literacy, information literacy, visual literacy, Internet literacy or news literacy. UNESCO (2011) generally defines media literacy as, “competencies that emphasize the development of enquiry-based skills and the ability to engage meaningfully with media and information channels in whatever form and technologies they are using” (p. 18). We may consider Media Education as the process aiming to develop the competencies, whereby media literacy is the outcome (Buckingham, 2003).

Thus, the 21st century citizens must develop media literacy competences at five levels:

1. Techniques for dealing with digital technologies, which implies capabilities in terms of hardware, software, programming, and security monitoring (UNESCO, 2014);
2. Reflective and creative, to achieve the critical analysis and production of media messages (Buckingham, 2009; UNESCO, 2011), which implies the ability to evaluate content, reflect on the political and economic influence in the media, and know how to deal with risks and opportunities (UNESCO, 2014);
3. Self-regulation. (subject-media), which is the use of technology and media in a personal logic, exercising rights such as being connected or not, deleting the digital footprint, using media innovatively and creatively whether for entertainment, learning or work. (UNESCO, 2014).
4. Social or general, crucial to an effective participation in contextualized practices that only make sense together with the aforementioned, in a holistic way, since “the skills cannot be understood out of context”. (2013). (p. 361). Meyers et al.
5. Pedagogical, which consists of knowing how to use the media in learning situations, not just “to know its potential and its risks,” but rather “to know and know how to use their languages and codes in the critical perspective of a broad learning that today is an essential part of the learning experience” (Fantin, 2012, pp. 71–72).

This citizens’ empowerment, which implies transliteracy (Thomas, 2008) and transmedia (Alper & Herr-Stephenson, 2013) skills, should begin in the cradle (Gonnet, 1999) and continue on a lifelong basis (Rivoltella, 2012). Media Literacy, as has been advocated in UNESCO documents (1982, 2007, 2014),